Pending Claims

1. (Currently Amended) A fluid pharmaceutical composition comprising an aqueous dispersion of micelles having an average diameter less than about 300 nm, said micelles comprising: (i) a podophyllotoxin selected from the group consisting of etoposide and teniposide, and (ii) a surfactant consisting essentially of the covalently linked reaction product of tocopherol ~~tocoferol wherein said tocoferol consists of tocoferol covalently linked to~~ and a water-soluble polymer and being at least 99% free of unreacted tocopherol ~~and wherein not more than about 1.5% of said tocopherol is free tocopherol~~.

2. Cancelled.

3. Cancelled.

4. (Previously presented) The fluid pharmaceutical composition of claim 1 wherein the podophyllotoxin is etoposide.

5. Cancelled .

6. Cancelled.

7. (Previously presented) The fluid pharmaceutical composition of claim 1 wherein the water-soluble polymer is poly-oxyethylene, poly-oxyethylene-poly-oxypropylene copolymers polyacrylamides, polyglycerols, polyvinylalcohols, polyvinylpyrrolidones, polyvinylpyridine N-oxides, copolymers of vinylpyridine N-oxide and vinylpyridine, polyoxazolines, polyacroylmorpholines.

8. (Previously presented) The fluid pharmaceutical composition of claim 1 wherein the water-soluble polymer is a polypeptide.

9. (Previously presented) The fluid pharmaceutical composition of claim 1 wherein the water-soluble polymer further comprises a second hydrophobic group in addition to tocoferol.

10. (Currently amended) The fluid pharmaceutical composition of claim 1 wherein the tocoferol covalently linked to a water-soluble polymer is d-α-tocopheryl polyethylene glycol 1000 succinate (TPGS) or a derivative thereof ~~formed by attaching a polymer on the tocoferol succinate portion or by attaching~~ in which the TPGS is attached to the hydroxyl group of polyethylene glycol (PEG).

11. (Previously presented) The fluid pharmaceutical composition of claim 10 wherein the d-α-tocopheryl polyethylene glycol 1000 succinate is present at a concentration from about 0.02 wt % to about 20 wt %.

12. (Previously presented) The fluid pharmaceutical composition of claim 10 wherein the d-α-tocopheryl polyethylene glycol 1000 succinate is present at a concentration from about 0.02 wt % to about 10 wt %.

13. (Previously presented) The fluid pharmaceutical composition of claim 10 wherein the d-α-tocopheryl polyethylene glycol 1000 succinate is present at a concentration from about 4 wt % to about 10 wt %.

14. (Previously presented) The fluid pharmaceutical composition of claim 1 further comprising a targeting molecule.

15. (Previously presented) The fluid pharmaceutical composition of claim 14 wherein the targeting molecule comprises a targeting moiety and a lipophilic moiety.

16. (Previously presented) The fluid pharmaceutical composition of claim 15 wherein the targeting moiety is an antibody, hormone, carbohydrate, drug, cytokine, or interleukin.

17. (Previously presented) The fluid pharmaceutical composition of claim 15 wherein the targeting moiety is a peptide.

18. (Currently amended) A method of treating an animal comprising administering to the animal a fluid pharmaceutical composition comprising an aqueous dispersion of micelles having an average diameter less than about 300 nm, said micelles comprising:

a podophyllotoxin selected from the group consisting of etoposide and teniposide, a surfactant consisting essentially of the covalently linked reaction product of tocopherol ~~and tocoferol wherein said tocoferol consists of tocoferol covalently linked to~~ and a water-soluble polymer and being at least 99% free of unreacted tocopherol .

19. (Currently amended) The method of claim 18 wherein the ~~tocoferol covalently linked to a water-soluble polymer~~ surfactant is d-α-tocopheryl polyethylene glycol 1000 succinate (TPGS) or a derivative thereof ~~formed by attaching a polymer on the tocoferol~~

~~succinate portion or by attaching~~ in which the TPGS is attached to the hydroxyl group of polyethylene glycol (PEG).

20. (Currently amended) A method of delivering a podophyllotoxin selected from the group consisting of etoposide and teniposide to a cell comprising administering to the cell a fluid pharmaceutical composition comprising an aqueous dispersion of micelles having an average diameter less than about 300 nm, said micelles comprising:

a podophyllotoxin selected from the group consisting of etoposide and teniposide; and a surfactant consisting essentially of the covalently linked reaction product of tocopherol ~~tocoferol wherein said tocoferol consists of tocoferol covalently linked to~~ and a water-soluble polymer and being at least 99% free of unreacted tocopherol.

21. (Currently amended) A method of inhibiting cancer comprising administering to an animal having cancer a fluid pharmaceutical composition comprising an aqueous dispersion of micelles having an average diameter less than about 300 nm, said micelles comprising:

a podophyllotoxin selected from the group consisting of etoposide and teniposide; and a surfactant consisting essentially of the covalently linked reaction product of tocopherol ~~tocoferol wherein said tocoferol consists of tocoferol covalently linked to~~ and a water-soluble polymer and being at least 99% free of unreacted tocopherol.

22. (Previously presented) The fluid pharmaceutical composition of claim 1 wherein the micelles have an average diameter less than about 100 nm.

23. (Previously presented) The fluid pharmaceutical composition of claim 1 wherein the micelles have an average diameter less than about 50 nm.

24. (Previously presented) The fluid pharmaceutical composition of claim 1 wherein the micelles have an average diameter from about 3 nm to about 25 nm.